CITY OF NEWPORT BEACH

COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING DIVISION
3300 Newport Boulevard | P.O. Box 1768 | Newport Beach, CA 92658
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COMMERCIAL
PLAN REVIEW COMMENTS

Project Description:

Project Address: **Plan Check No.:**

Permit App. Date: Permit App. Expires:

Use: Occupancy: Const. Type:

CY Cut/Fill: No. Stories: Permit Valuation:

Architect/Engineer: Phone:

Owner/Tenant: Phone:

Applicant/Contact: Phone:

Plan Check Engineer: **Phone:**

X	1st Review: (date)		2nd Review: *Italic comments*		3rd Review: **By Appointment**

The project plans were reviewed for compliance with the following codes and standards:
2010 CBC; 2010 CPC; 2010 CEC; 2010 CMC; 2008 Building Energy Efficiency Standards (BEES); 2010 California Green Building Standards Code (CALGreen); & Chapter 15 of the Newport Beach Municipal Code (NBMC).

The code section references are from the 2010 CBC, unless otherwise stated.

- *TO EXPEDITE PROJECT APPROVAL:* Please provide a written response indicating how and where each comment was resolved on the plans.
- Resubmit all previously reviewed plans, updated plans and supporting documents with each subsequent review.
- *AFTER 2nd PLAN REVIEW*: Please call the plan check engineer listed above to schedule a plan review appointment, to expedite project approval.
- For clarification of any plan review comment, please call the plan check engineer listed above.
- Plan review status is available online at ***www.newportbeachca.gov***. Project status is also available using the interactive voice response system at 949-644-3255, or by speaking with a permit technician at 949-644-3288 during business hours.

GENERAL

1. Include the following on all plan sheets in the title block:
   a. Site address,
   b. Plan preparer's name, address and telephone number,
   c. Property owner's name, address and telephone number.
2. All permits related to the proposed project shall be issued at the same time, or separate plans and plan review will be required for items not issued with this review. Provide additional permit worksheets for the following:
   a. Accessory structures, detached patio covers and trellises,
   b. Detached or free-standing trash enclosures,
   c. Masonry or concrete fences over 3.5 ft high,
   d. Retaining walls over 4 ft high from the bottom of the foundation to the top of the wall.
3. Obtain plan review approval from the following:
   a. Building Division – EMP Plan Review,
   b. Fire Department,
   c. Grading Plan Review,
   d. Planning Department,
   e. Public Works Department,
   f. Public Works – Harbor Resources Division,
   g. Orange County Health Department.
4. All plan sheets shall be signed by the appropriate design professional(s). If the project scope allows plan preparation by other than a licensed individual, such plan preparer shall sign and date all plan sheets. BPCS 5500, et seq.
5. Identify the individual who will serve as the "Design Professional in Responsible Charge" (DPRC) for the project on the first sheet of the plans. The DPRC is responsible for reviewing and coordinating all submittal documents prepared by others, for compatibility with the building design. (107.3.4 & NBMC 15.02.010)

BUILDING PLANNING (CHAPTERS 3, 4, 5, 6):

6. Provide Building Code Analysis on the title/cover sheet. Include the following code information for each building proposed:
   a. Description of use, Occupancy, Type of Occupancy Separation (separated/unseparated), Type of Construction.
   b. Allowable/actual floor area, allowable/actual height, number of stories, sprinklers, and fire alarm.
   c. Specify code fire resistive requirements for exterior walls, roof/floor horizontal assembly, openings, occupancy separation, and shafts/exit enclosures.
   d. Specify number of required exits per floor and for the building.
7. On the site plan:
   a. Dimension distances from building(s)/all projecting elements to all property lines, street center lines, and adjacent existing or proposed structures on the site.
   b. Show the building area, use, occupancy, and type of construction of all new/existing buildings on the site.
   c. Show all interior assumed lot lines, any designated flood plains, open space easements or development restricted areas.
   d. Clearly delineate any frontage used to justify allowable area increases per CBC 506.2.

8. Clearly label and identify on the floor plans:
   a. Fire-resistive corridors, exit enclosures, exit passageways, horizontal exits, occupancy separation walls and floors, fire resistive shafts, and fire walls, along with their fire-resistive ratings.
   b. Common path of travel, exit access travel distance, required number of exits, occupant load, & required exit width. (1001.1)
   c. Accessible means of egress continuity components. (1007.2)
9. Accessible means of egress shall be continuous to public way and shall consist of one or more of the following components (1007.2):
   a. Accessible routes per 1114B.1.2.
   b. Interior/Exterior stairways per 1133B.4.
   c. Elevators per 1116B.1.
   d. Platforms 1116B.2.
   e. Horizontal exits per 1025.
   f. Ramps per 1133B.5
   g. Area of refuge per 1007.6.
10. Show the maximum height of the building above the grade plane as defined in CBC 502.1. Demonstrate whether the lower level is a basement based on the definitions in CBC 502.1.
11. The floor area of a mezzanine shall be considered a part of the story in which it is located, unless considered a separate story. (505.1)
12. For buildings with mixed occupancies:
   a. Un-separated Occupancy: The allowable area per story shall be based on the most restrictive provision for the occupancies. (508.3)
   b. Separated Occupancy: The maximum total building area shall be such that the sum of the ratios for each of the actual to allowable are does not exceed 1. (508.4)
13. Structural elements in exterior walls required to be fire-resistive construction shall have fire-resistive protection equal to or greater than that required for an exterior bearing wall. (Table 602)
14. When two or more buildings are on the same property and they are not analyzed to comply as one building, the buildings shall have an assumed property line between them for determining wall and opening protection, and roof cover requirements or treated as a single building per Section 705.3.
15. When a new building is constructed adjacent to an existing building, show the required wall and opening protection requirements for the existing building will be maintained. (503.1.2, Table 508.4, Table 705.8 and 705.3)
16. Address the specific occupancy related provisions for the XXX occupancy areas in accordance with Chapter 4.

FIRE-RESISTANCE RATED CONSTRUCTION AND INTERIOR FINISHES (CHAPTER 7, 14, 8):

EXTERIOR WALLS:

17. Exterior walls less than XXX ft. from property line or assumed property line shall have a 30" parapet. (Table 602, 705.11)
18. Fire-resistive exterior wall construction shall be maintained through crawl spaces, floor framing, attic spaces, and other similar areas to the height required by 705.11. (705.6)
19. The maximum (Un-protected/protected) exterior wall openings area shall not exceed that allowed in Table 705.8.
20. Where protected and unprotected openings occur in the exterior wall in any story the total area shall comply with the unity formula (7-2) in Section 705.8.4.

21. Projections are limited to XXX-ft into yards permitted by CBC 704.2. Projections located where openings are required to be protected shall be non-combustible, heavy timber, or one hour construction. (705.2)

22. Openings in non-fire-resistance-rated exterior wall assemblies that require protection in accordance with Section 705.3, 705.8, 705.8.5, or 705.8.6 shall have a fire-protection rating of not less than ¾ hour. (715.5)

FIRE BARRIER:

23. Provide a fire rated Fire Barrier in accordance with Section 707 for:
    a. X-hour Shaft enclosure per 708.4. (2-hour resistive construction in all buildings connecting 4 stories or more. 1-hour for less than 4 stories)
    b. X-hour Exit enclosure per 1022.1. (2-hour resistive construction in all buildings connecting 4 stories or more. 1-hour for less than 4 stories)
    c. X-hour Exit passageway per 1023.3.
    d. X-hour Horizontal exit per 1025.1.
    e. X-hour Atrium enclosure per 404.6.
    f. X-hour Fire barrier for incidental use area at the (Location) per 508.2.5 and Table 508.2.5.
    g. X-hour Control areas per 414.2.4.
    h. X-hour Occupancy separation between X & X occupancies per 508.4 & Table 508.4.
    i. X-hour Fire area separation per 707.3.9 & Table 707.3.9.

24. Fire Barrier shall extend from floor/ceiling to the underside of sheathing/deck above, thru any concealed spaces. (706.5)

25. Provide X-hour door assemblies in X-hour fire barrier. (707.6, Table 715.4)

26. Openings in fire barriers shall be limited to a maximum aggregate width of 25% of the length of the wall, and the maximum area of any single opening no larger than 156 square feet with unless tested to match wall rating. (707.6)

27. All structural elements supporting a fire barrier must have the same fire resistive ratings as the required fire barrier. Exception: Supporting construction for 1-hour fire barriers of incidental uses per T-508.2.5 in buildings of Type IIB, IIIB, & VB unless required by other sections of this code. (707.5.1)

FIRE PARTITION:

28. Provide a 1-hour fire rated Fire Partition in accordance with 709 for:
    a. Walls separating dwelling units within same building. (420.2)
    b. Walls separating sleeping units within same building or from other occupancy contiguous to them in the same building. (420.2)
    c. Walls between mall tenant spaces. (402.7.2).
    d. Corridors per 1018.1
    e. Elevator lobby per 708.14.1.
    f. Walls separating enclosed tenant spaces in high-rise buildings and in building of Types I, IIA, IIIA, IV, or VA construction of Group A, E, H, I, L, & R-2.1 occupancies.

29. Fire Partition continuity must be detailed in accordance with 709.4 CBC.3.

30. Provide X-hour door assemblies in X-hour fire partition. (709.6, Table 715.4)

31. Glazed openings into one hour corridor/fire partition/fire barrier shall be protected per CBC Table 715.5. The total area of such openings shall not exceed 25% of the common wall with any room (715.5.8.2).

OTHER COMPONENTS:

32. Provide a complete architectural section of one-hour corridor detailing fire-resistive construction of the walls and ceilings. Detail all duct and other penetrations. (709.4, 1018.1, 715.1, Table 715.4, 716.5.4)

33. Corridor walls may terminate at the ceiling, if the corridor ceiling is constructed as required for the corridor walls. (709.4, exception #3)

34. Doors and their frames opening into a one-hour corridor shall be labeled 20-minute assemblies with tight fitting smoke and draft control assemblies with self or automatic closers. (715.4.3)

35. Provide an enclosed Elevator Lobby where an elevator shaft enclosure connects more than two floors for Group A, E, H, I, L, R-1, R-2 Occupancies or high-rises and more than three floors for all other occupancy. (708.14.1)

36. Lobby enclosure shall separate the elevator shaft enclosure doors from each floor by 1-hour fire partitions. Doors protecting openings in the elevator lobby enclosure walls shall be 20 min fire rated with smoke and draft control in accordance with 715.4.3. (708.14.1, 709)

37. Provide detail of shaft construction, continuity, openings, penetrations, top and bottom enclosure demonstrating compliance with Section 708.5 through 708.13. (Enclosure shall have a rating equal to floor assembly penetrated, but need not exceed 2-hours) (708.4)

38. Duct and Air Transfer openings into: ***(Plan Check Note: double check exceptions)***

    a. Fire walls shall be protected with listed fire dampers. (716.5.1)

    b. Horizontal exits shall be protected with listed smoke damper. (716.5.1.1, 716.5.2.1)

    c. Fire barriers for Occupancy Groups A, E, H, I, L, R, & high-rise buildings shall be protected with approved fire & smoke dampers. (716.5.2)

    d. Fire barriers for B, F, M, S, U occupancy groups shall be protected with listed fire dampers. (716.5.2)

    e. Shaft enclosure shall be protected with approved smoke and fire dampers. (716.5.3)

    f. Fire partitions shall be protected with listed fire dampers. (716.5.4)

    g. Corridors requiring smoke and draft control doors in accordance with 715.4.3 shall protected with listed fire and smoke dampers. (716.5.4.1)

    h. Elevator lobby shall be protected with listed fire and smoke dampers. (708.14.1)

    i. Fire rated exterior wall required to have protected opening shall be protected with listed fire dampers. (705.10, 716.5.6)

    j. Horizontal assemblies shall be protected by shaft enclosure or comply with 716.6.1 for through penetration or 716.6.2 for membrane penetrations. (716.6)

39. Ducts and air transfer openings shall not penetrate exit enclosures and exit passageways except as permitted by Sections 1022.4 and 1023.6 respectively. (716.5.2)

40. Detail through and membrane penetrations in fire-resistive walls per CBC 713.3.

41. Detail fire resistive penetrations in fire-resistive floors and ceilings per CBC 713.4.

42. Joints install in or between fire rated walls, floor/ceiling and roofs shall be protected by an approved fire-resistant joint system designed to resist the passage of fire for time period as required by the fire rated construction. (714)

43. Provide draft stops in floors, attics, and mansards per Sections 717.3 & 717.4.

FIRE PROTECTION SYSTEMS (CHAPTER 9):

44. Provide approved automatic sprinkler systems (903.2, NBMC 15.04.130):

    a. New buildings with total building area exceeding 5,000 sf.; except for Group R Occupancy.

    b. Existing buildings when the total area of the addition and reconstruction is 50% or more of the existing building area and the resulting building area exceeds 5,000 sf.; except for Group R Occupancy.

c. New buildings with a Group R fire area.

d. Existing buildings with a Group R fire area when the total area of addition and reconstruction exceeds 2,000 sf., or with the existing building is already equipped with automatic fire sprinkler system.

45. Provide fire sprinklers at XXX for this project for Group XXX Occupancy in accordance with 903.2XXX.

46. Provide fire sprinkler at XXXXX for this project based on Table 903.2.11.6. (903.2.11.6)

47. Provide a Class XXX Standpipe per CBC 905.3XXX. Show hose cabinet locations or outlets on each floor plan and roof plan.

48. Provide fire alarm and detection system in accordance with 907.2XXX for the XXX Occupancy area.

MEANS OF EGRESS (CHAPTER 10):

49. Calculate the maximum occupant load per Table 1004.1.1 for each story/room/space and list it on the floor plan.

50. Every assembly area shall have the occupant load posted in a conspicuous place near the main exit of the room. (1004.3)

51. In a single-story building two exits or more are required when occupant load exceeds 50 or egress access travel distance exceeds 75 feet. (1021.1, 1021.2 CBC 1021.2)

52. In a two-story building two exits or more are required when occupant load exceeds 29 or exit access travel distance exceeds 75 feet. (1021.1, 1021.2, Table 1021.2)

53. Story/rooms/spaces with a common path of egress travel exceeding (75 feet / 25 feet for H-1, H-2, H-3 / 100 for Occupancy B, F, & S with less than 30 occupant or in buildings equip with sprinklers) shall have two separate and distinct means of egress. (1014.3)

54. Two exits or more are required when occupant load of a room or space exceeds 49 or common path of egress travel exceeds 75 feet. (1015.1, Table 1015.1, 1041.3)

55. When two exits are required from a building or area they shall be separated by (one-half/one-third if sprinklered throughout) the diagonal dimension of the building or area served. (1015.2.1)

56. Exit minimum clear width shall be not less than the total occupant load served by the means of egress multiplied by 0.3 inches per occupant for stairways and 0.2 inches for other egress component. (1005.1)

57. Exit access travel distance to reach an exit shall not exceed (Table 1016.1):

    a. Non-sprinklered building:

        i. A, E, F-1, M, R, S-1, B: 200 FT.

        ii. F-2, S-2, U: 300 FT.

    b. Sprinklered building:

        iii. A, E, F-1, M, R, S-1, B: 250 FT.

        iv. B: 300 FT.

        v. F-2, S-2, U: 400 FT.

    c. Measure paths at right angles unless diagonal unobstructed path is insured and along slope of stairs at the center. (1016.1)

58. Doors opening into the path of egress travel shall not reduce the required width to less than one half during the course of swing. When fully open, the door shall not project more than 7" into the required width. (1005.2)

59. Each leaf of door in the means of egress shall provide 32 inches clear opening and a minimum height of 6'-8", but in no case shall any single door leaf exceed 48 inches. (1008.1.1)

60. Doors serving an occupant load of 50 or more or hazardous rooms /areas shall swing in the direction of exit travel. (1008.1.2)

61. All exit doors and gates serving H occupancy or space/room with an occupant load of 50 or more of Group A, E, I-2, I-2.1, or assembly areas not classified as assembly occupancy shall not be provided with a latch or lock, unless it is panic hardware. (1008.1.10)

62. Revolving, sliding or overhead doors shall not be used as exit doors. (1008.1.2) ***See exceptions***

63. Show that power operated doors are capable of being manually opened to permit exit travel in the event of a power failure. Opening force shall comply with Section 1008.1.3. (1008.1.4.2)

64. When additional doors are provided, they shall conform to the provisions for exit doors. (1008.1)

65. Door swinging over landing shall not reduce the width by more than seven inches when fully open. When serving 50 or more, the door in any position shall not reduce the required width to less than one-half. (1008.1.6)

66. Landings or floor level at doors shall be maximum ½ inch below the threshold. Raised thresholds and floor level changes greater than 1/4 inch at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal. (1008.1.7)

67. Stairs exit enclosure shall conform to the following (1022.1):

    a. Only exit doors can open into exit enclosures. (1022.4)

    b. Penetrations shall be limited to sprinkler piping, standpipes, fire department communication system, & equipment, ductwork, electrical raceway serving the enclosure. (1022.4)

    c. Doors opening into exit enclosures shall be protected per CBC 715. (1022.3)

    d. Exit enclosures shall terminate at an exit discharge or an exit passageway complying with Section 1023 of the same fire-resistive construction as the enclosure leading to the outside of the building. (1022.2)

    e. Open space under the stairs shall not be use for any purpose. (1022.1)

68. Interior stairway means of egress doors shall be openable from both sides without the use of a key or special knowledge or effort. Except stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side. (1008.1.9.10)

69. Exterior stairs shall be separated from the interior of the building with the same rating required for interior stairs. (1026.6)

70. Provide section and details of interior/exterior stairway showing:

    a. Maximum rise 7 inches (4" min) and minimum run (tread) of 11 inches. (1009.4)

    b. Minimum head room of 6 feet 8 inches. (1009.2)

    c. Minimum width of 44 (36) inches. (1009.1)

    d. Provide details and notes showing framing (stringer) size, bracing, connections, footings.

    e. Enclosed usable space under stairway requires minimum 1-hour fire rated construction or same as the stair rated enclosure. Access to the enclosed space shall not be directly from within the stair enclosure. (1009.6.3)

71. Provide 42 inch high protective guardrail for decks, porches, balconies and raised floors, (more than 30 inches above grade or floor below) and open side(s) of stair landings. Openings between balusters/rails shall be less than 4 inches. (1013)

72. Corridor and exit balcony width shall be not less than 44 inches (36 inches). The required width shall be unobstructed except of access doors. (1018.2, 1019.1).

73. Dead end corridors shall not exceed (20/50) ft in length. (1018.4)

74. One hour corridors and any enclosed ceilings within them shall not be used as an integral part of the duct system. (1018.5)

75. At rooms with exhaust fans adjacent to corridors, show how make up air is provided. Doors opening into corridors cannot be undercut and no louvers provided. (1018.5)

76. In fully sprinklered office buildings, corridors may lead through enclosed elevators lobbies, provided all areas of the building have access to an exit, without passing through on elevator lobby. (1018.6)

77. The number of accessible means of egress required shall equal the minimum of exits required per Section 1015.1 & 1021.1. (1007.1)

78. Area of Refuge (1007.6):

    a. Max travel distance from any accessible space shall not exceed Table 1016.1.

    b. Shall have direct access to stairways in exit enclosure (1007.3, 1022) or elevator (1007.4).

    c. Each area of refuge must accommodate minimum (2) wheelchair 30" x 48", but not less than 1 wheelchair space per 200 occupants per floor.

    d. Not permitted to encroach into required means of egress width.

    e. Must be separated from the rest of the building by smoke barrier or horizontal exit.

    f. Provide two-way communication system in accordance with 1007.8.1 & 1007.8.2.

    g. Provide details for signage as required per 1007.9 & 1007.10.

    h. Provide notes and specification for two-communication system and instructions in accordance with 1007.8 & 1007.11.

79. Where elevator lobby is used as an area of refuge, the shaft and lobby shall comply with Section 1022.9 for smoke-proof enclosure. (1007.6)

80. Stair exits from an area of refuge require a minimum of 48 inches between handrails. (1007.3)

81. Where elevation changes less than 12 inches occur in the means of egress, sloped surfaces shall be used. (1003.5)

82. Provide gurney-size accessible elevator (3002.4, 3002.4a):

    a. Group A, E, H, I, L, R-1, R-2, R-2.1 occupancies, high-rise building, and other applications listed in Section 1.11 regulated by the Office of the State Fire Marshal

    b. All other occupancies: In buildings four or more stories above, or four or more stories below grade plan.

    c. Elevator car size shall be able to accommodate a 24" x 84" ambulance gurney/stretcher with minimum 5" radius corners.

    d. Elevator car shall be provided with minimum clear dimension of 80" x 54" from wall to return panel and 51 inches from wall to return panel with minimum 42 inches side slide door.

    e. Provide signage, electrical, and safety features in accordance to Section 3002.4.

83. The required number of exits from any story shall be maintained until arrival at grade or public way. (1021.1.1)

84. Exit signs are required when 2 or more exits are required. Show location of all exit signs. (1011.1)

85. Show conformance for low level exit signs and exit path marking in A, E, I, R-1, and R-2.1 occupancies per CBC 1011.6 and 7 as enforced by the State Fire Marshall.

86. Exterior balconies, stairways and ramps shall be located at least 10 feet (3048 mm) from adjacent lot lines and from other buildings on the same lot unless the adjacent building exterior walls and openings are protected in accordance with Section 705 based on fire separation distance. (1027.3)

87. Egress court serving an occupant load greater than 10 is less than 10 feet (3048 mm) in width; the egress court walls shall be minimum 1-hour-fire-resistance-rated construction for a distance of 10 feet (3048 mm) above the floor of the court. Openings within such walls shall be protected by opening protective having a fire protection rating of not less than 3/4 hour. (1027.5.2)

MISC. PROVISIONS (CHAPTER 12, 15, 24, ….):

88. Provide class "A" roof assembly. (1505.1, Table 1505.1, NBMC 15.04.200)

89. Provide following roof specifications on roof plan (1505.1):
    a. Manufacturer and ICC/UL/SFM number for roof assembly.
    b. Show roof slope(s) of all areas.
    c. Note on Plans: "Installation of roofing shall be in accordance with manufacturer's specifications."

90. Show sizes/locations of the roof/deck drains and overflows. (1503.4 and CPC 1108)

91. Specify minimum 1/4 inch per foot roof slope for drainage along flow lines or design to support accumulated water. (CPC 1611.2)

92. Specify approved weatherproof walking surface material at decks and balconies. (1505.1)

93. Provide and detail access to equipment on roof (CMC 904.10):
    a. Buildings higher than 15 feet shall have an inside means of access.
    b. Access shall be a permanent or foldaway inside stairway or ladder.
    c. Roof access scuttle or trapdoors shall be minimum 22" x 24".

94. Provide 42 inches high guards where the roof hatch opening or mechanical equipment is located within 10 feet of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches above the floor, roof or grade below. The guard shall be constructed so as to prevent the passage of a 21-inch-diameter sphere and shall extend a minimum of 30 inches to either side. (1013.5, 1013.6)

95. Provide plumbing fixtures count analysis per CPC Table 4-1. (CPC 412.1)

96. Provide separate toilet facilities for men and women. (CPC 412.3 with exceptions)

97. Toilet rooms may not open directly to food preparation facilities for service to the public. (1210.5)

TITLE 24 DISABLE ACCESS (CHAPTER 11B):

SITE DEVELOPMENT & ACCESSIBLE ROUTE OF TRAVEL

98. Show on site plan the accessible path of travel from parking to building entrance. Show all grade changes, ramps, etc.

99. Provide detectable warning strip 36" wide where a walk crosses or adjoins a vehicular way and the walking surface is not separated by curbs, railing or other approved elements at the following locations: (1133B.8.5)

100. Provide a detail for pattern and dimensions of detectable warning on plan. Incorporate a copy of product warranty onto drawings per department policy CBC 1133B.8.5 (copy available on Building Division web page)

ENTRANCES & EXITS

101. Every required exit doorway, which is located within an accessible path of travel, shall be of a size as to permit the installation of a door not less than 3' in width and not less than 6'-8" in height. (1133B.1.1.1.1)

102. The space between two consecutive door openings in a vestibule shall provide a minimum of 48" plus the door width when the door is positioned at an angle of 90 degrees from its closed position. Doors in a series shall swing either in the same direction or away from the space between the doors. See Figures 11B-30 & 31 for strike edge clearance. (1133B.2.4.4)

SIGNS & IDENTIFICATION

103. All building entrances that are accessible to and usable by persons with disabilities and at every major junction along or leading to an accessible route of travel shall be identified with a sign displaying the International Symbol of Accessibility, and with additional directional signs, as required, to be visible to persons along approaching pedestrian ways. (1117B.5.8.1.2 & 1127B.3)

104. Doorways leading to men's sanitary facilities shall be identified by an equilateral triangle ¼" thick with edges 12" long and a vertex pointing upward. Women's sanitary facilities shall be identified by a circle ¼" thick and 12" in diameter. (1115B.6)

105. Unisex sanitary facilities shall be identified by a circle ¼" thick, 12" in diameter, with a ¼" thick triangle superimposed on the circle and within the 12" diameter. (1115B.6)

106. Geometric (circle & triangle) symbols on sanitary facility doors shall be centered on the door at a height of 60" and their color and contrast shall be distinctly different from the color and contrast of the door. (1115B.6)

NOTIFICATION APPLIANCES FOR THE HEARING IMPAIRED

107. Visual warning devices for the hearing impaired are required to be installed (added) within the suite per T-24 requirements under one of the following conditions: (907.5.2 and 1114B.1.1)

    a. Building is equipped with visual warning devices.

    b. Existing fire alarm panel can support visual warning devices for the entire building.

    c. The fire alarm panel is being upgraded to support visual warning devices for the entire building.

    d. The occupancy group is changing.

108. Approved visible alarm notification appliances for the hearing impaired shall be installed in accordance with the provisions of NFPA 72 in the following areas: (1114B.1.1 and 907.5.2.3.1)

    a. Sanitary facilities, including restrooms, bathrooms and shower rooms

    b. Corridors

    c. Music practice rooms

    d. Gymnasiums

    e. Multipurpose rooms

    f. Occupational shops

    g. Occupied rooms where ambient noise impairs hearing of the fire alarm

    h. Lobbies

    i. Meeting rooms

    j. Classrooms

ACCESSIBLE PARKING

109. Provide disabled parking spaces as required by Table 11B-6 for parking lot/structure. Specify the total number of parking spaces and disabled parking spaces required by Table 11B-6. (1129B.1)

110. Accessible parking spaces serving a particular building shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance (as near as practical to an accessible entrance). (1129B.1 & 1114B.1.2)

111. One in every eight accessible spaces, but not less than one, shall be served by a loading and unloading access aisle 96" wide minimum placed on the driver's opposite site and shall be designated "van accessible". All such spaces may be grouped on one level of a parking structure. The words, "No parking" shall be painted within the loading area with 12" high letters located where it is visible to parking enforcement official.(1129B.3.2)

112. Accessible parking spaces shall be so located that persons with disabilities are not compelled to wheel or walk behind parking spaces other than their own. (1129B.3.3)

113. Curb ramps shall not encroach into any parking space or the adjacent access aisle. (1129B.3.3) See figures 11B-18A, B, C.

114. The surface of each accessible parking space or stall shall have a surface identification duplicating either of the following schemes: (1129B.4, Fig 11B-18A, B & C)

    a. By outlining or painting the stall or space in blue and outlining on the ground in the stall or space in white or suitable contrasting color a profile view depicting a wheelchair with occupant, or

b. By outlining a profile view of a wheelchair with occupant in white on blue background. The profile view shall be located so that it is visible to a traffic enforcement officer when a vehicle is properly parked in the space and shall be 36" high by 36" wide. See Figures 11B-18A , 18B & 18C.

DOORS

115. When installed, exit doors shall be capable of opening so that the clear width of the exit is not less than 32". (1133B.1.1.1.1, Fig 11B-5B & 11B-33)

116. Where a pair of doors is utilized, at least one of the doors shall provide a clear, unobstructed opening width of 32" with the leaf positioned at an angle of 90 degrees from its closed position. (1133B.2.3.1)

117. There shall be a level and clear floor or landing on each side of a door. The level area shall have a length in the direction of door swing of at least 60" and the length opposite the direction of door swing of 48" as measured at right angles to the plane of the door in the closed position. (1133B.2.4.2, Fig 11B-26)

118. The width of the level area on the side to which the door swings shall extend 24" past the strike edge of the door for exterior doors and 18" past the strike edge for interior doors. Doors recessed 8" or more require this clearance within the recessed area adjacent to the door. (1133B.2.4.3, Fig 11B-26(a))

119. Provide clear space of 12" past strike edge of the door on the opposite side to which the door swings if the door is equipped with both a latch and a closer. (Fig. 11B-26(a))

120. The floor or landing shall be not more than ½" lower than the threshold of the doorway. (1133B.2.4.1, Fig. 11B-32)

STAIRWAYS

121. Handrails shall extend a minimum of 12" beyond the top nosing and 12" plus the tread width beyond the bottom nosing and ends shall be returned or terminate in newel posts or safety terminals. (1133B.4.2.2, Fig 11B-35 & 37)

122. The orientation of at least one handrail shall be in the direction of the run of the stair and perpendicular to the direction of the stair nosing, and shall not reduce the minimum required width of the stairs. (1133B.4.2.4, Fig 11B-37)

123. The handgrip portion of handrails shall be not less than 1-1/4" nor more than 1-1/2" in cross-sectional nominal dimension or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corners. Gripping surfaces (top and sides) shall be uninterrupted by newel posts, other construction elements, or obstructions. Any wall or other surface adjacent to the handrail shall be free of sharp or abrasive elements. Edges shall have a minimum radius of 1/8. (1133B.4.2.6, Fig 11B-36)

124. The upper approach and the lower tread of each stair shall be marked by a strip of clearly contrasting color at least 2" wide and not more than 4" wide placed parallel to and not more than 1" from the nose of the step or landing to alert the visually impaired. The strip shall be of material that is at least as slip resistant as the other treads of the stair. (1133B.4.4, Fig 11B-35)

125. Where stairways occur outside a building, the upper approach and all treads shall be marked by a strip of clearly contrasting color at least 2" wide and not more than 4" wide placed parallel to and not more than 1" from the nose of the step or landing to alert the visually impaired. The strip shall be of a material that is at least as slip-resistant as the other treads of the stair. A painted strip shall be acceptable. (1133B.4.4, Fig 11B-35)

126. Open risers are not permitted. (1133B.4.5.3)

SINGLE ACCOMMODATION SANITARY FACILITIES

127. Accessible water closet shall comply with Section 1115B.4.1. A minimum 60" x 48" maneuvering space shall be provided in front of the water closet.

128. Clear floor space at fixtures: Doors may swing into that portion of maneuvering space that does not overlap the fixture's required clear floor space. (1115B.3.1.2, Fig. 11B-1E (c) and (e))

129. A minimum of 60"x 60" maneuvering space shall be provided in front of the water closet if the compartment has a side-opening door. (1115B.3.1.4.2)

130. A minimum of 60" x 48" maneuvering space shall be provided in front of the water closet if the compartment has an end-opening door. (1115B.3.1.4.2)

131. A minimum of (60" wide x 56" long) maneuvering space shall be provided for water closets not within a water closet compartment. (1115B.4.1.2.1, Fig. 11B-1E (a))

132. A minimum of (60" wide x 56" long) maneuvering space shall be provided for wall mounted water closets installed within a water closet compartment. (1115B.4.1.2.2, Fig. 11B-1E (b))

133. A minimum of (60" wide x 59" long) maneuvering space shall be provided for floor mounted water closets installed within a water closet compartment. (1115B.4.1.2.2, Fig. 11B-1E (b))

134. A minimum of (60" wide x 36" long) maneuvering space shall be provided in front of the clear space required in section 1115B.4.1.2.2 for floor and wall mounted water closets installed within a water closet compartment. (1115B.4.1.2.2, Fig. 11B-1E (c))

STRUCTURAL PROVISIONS (CHAPTERS 16-23):

135. Provide Structural Observations per Section 1709.

136. Provide Statement of Special Inspections per Section 1704.1.1. Include only those inspections specifically required for this project. Statement is required to be permanently recorded on plans.

137. Provide specifications for following materials on plans:

    a. Sawn lumber – Specify grade and species. All lumber is required to be grade marked

    b. Structural composite lumber – Specify manufacturer, type, E, Fb and Fv. Include reference to ICC report number

    c. Prefabricated wood I-joists – Specify manufacturer and type. Include reference to ICC report number

    d. Glued-laminated beams – Specify 24F-V4 for simple spans and 24F-V8 for cantilevered spans

    e. Plywood – Specify panel grade, panel span rating and manufacture per PS 1-95. All plywood panels are required to be grade marked

    f. Wood-based structural-use panels – Specify panel grade, panel span rating and manufacture per PS 1-92. All panels are required to be grade marked.

    g. Concrete – Specify cement type, f'c and minimum 5 sacks cement per cubic yard

    h. Masonry – Specify type, f'm, brick/block grade, grout f'c and mortar type

    i. Reinforcing steel – Specify ASTM designation, grade and fy

    j. Structural steel – Specify ASTM designation, grade and fy. Specify certified fabricator. Specify welding by licensed welders.

138. Plywood shear walls shall comply with CBC Table 2306.4.1. Provide shear wall schedule with following specifications:

    a. Minimum 3x nominal framing at panel edges and staggered edge nailing where nails are spaced 2" oc or closer (footnote e.)

    b. Minimum 3x nominal framing at panel edges and staggered edge nailing where 10d nails with more than 1½" penetration into framing are spaced 3" oc or closer (footnote f.)

    c. Where plywood panels are applied on both sides of wall and nail spacing is less than 6" oc, panel joints shall be offset to fall on different framing members, or framing shall be minimum 3x nominal at adjoining panel edges and edge nailing on each side shall be staggered (footnote h.)

    d. Shear walls with maximum shear design value greater than 350 plf, provide minimum 3x nominal framing at adjoining panel edges, or (2)2x nominal members fastened to transfer design shear value between framing members. Plywood panel edge nailing shall be staggered in both cases (footnote i.)

e. Shear walls with maximum shear design value greater than 350 plf, provide minimum 3x nominal sill plate with staggered panel edge nailing. Specify 2-20d box nails in lieu of 2-16d common nails for stud end nails in Table 2304.9.1 (footnote i., 2305.3.11)

f. Record maximum shear design value for each shear wall type (footnote i.)

g. Nails shall be common or galvanized box (hot-dipped or tumbled) (footnote j.)

h. Anchor bolts shall include steel plate washers, a minimum of ¼" x 3" x 3" in size, between sill plate and nut (2305.3.11)

139. Provide connection details of guardrail and/or handrail on open side of landings or stairs adequate to support 50 pounds per lineal foot or 200 pounds point load (whichever case is worst) at a right angle to the top rail. (1607.7.1)

140. Design intermediate components of guardrails for a 50 PSF lateral load. (1607.7.1.2)

141. Posts or columns supporting permanent structures and supported by a concrete or masonry slab or footing that is in direct contact with the earth shall be of naturally durable or preservative-treated wood (2304.11.2.7).

142. Calculate redundancy factors (ASCE 7-05 Section 12.3.4).

143. Provide design of drag/struts and drag/strut connections. Include calculations for required diaphragm nailing at drag/struts (2 rows diaphragm BN will be required if diaphragms on each side of drag/strut are loaded to capacity).

144. Identify drag/struts on plans and specify drag/strut nailing

145. Provide design/analysis of horizontal diaphragms, chords and chord splices.

146. Provide details showing transfer of shear forces between:

a. horizontal diaphragms and lateral force resisting elements and drag/struts

b. bases of lateral force resisting elements and horizontal diaphragms

c. bases of lateral force resisting elements and foundations

147. Design structural elements for support of discontinuous lateral force resisting elements in accordance with Section 12.3.3.3. Provide details of all connections.

148. Beams supporting discontinuous lateral force resisting elements are to be laterally braced at locations of connections of discontinuous elements.

149. Provide details showing transfer of shear wall holdown forces to foundation for shear walls above first floor.

150. Holdowns are required for all shear walls with net uplift forces. Use 0.9 DL for earthquake and 0.67 DL for wind for calculation of forces resisting shear wall overturning.

151. Provide grade beam design for continuous footings supporting lateral force resisting elements.

ADDITIONAL COMMENTS:

152.

153.